

ABSTRACT

Methods and systems for communication systems are disclosed. Chirp signals generated according to a chirp rate and carrier frequency are used for communication. The chirp rate can be determined by solving integrals or by simulation of transmission parameters. A chirp signal is transmitted from a base station and delayed versions of the chirp signals are created. The delayed versions are generated by the chirp signal reflecting off of reflectors. A receiving station receives an incoming signal. The incoming signal includes the LOS signal plus delayed versions, noise and/or interference. Unwanted signals, either LOS or delayed versions, noise and/or interference are removed from the incoming signal to obtain the desired chirp signal. Using the chirp rate, the chirp signal is converted to a corresponding digital signal.